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Serial No.: 10/659,590
Group: 1621

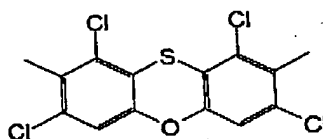
Amendments to the Claims

1. (Currently Amended) A method for the nuclear chlorination of ortho-xylene, which comprises reacting ortho-xylene with a chlorinating agent in the presence of at least one Friedel-Crafts catalyst and chlorine-substituted 2,8-dimethylphenoxathiin as co-catalyst, wherein the ratio of 4-chloro- to 3-chloro-1,2-dimethylbenzene is at least 3:1.
2. (Previously Presented) The method as claimed in claim 1, wherein tetrachlorinated 2,8-dimethylphenoxathiin is used.
3. (Previously Presented) The method as claimed in claim 1, wherein elemental chlorine or sulfuryl chloride is used as chlorinating agent.
4. (Previously Presented) The method as claimed in claim 1, wherein the co-catalyst is used in an amount of from 0.001 to 5% by weight, based on the amount of the ortho-xylene used.
5. (Previously Presented) The method as claimed in claim 1, wherein the ratio of Friedel-Crafts catalyst or its precursor to the co-catalyst is in the range from 500:1 to 1:5.
6. (Previously Presented) The method as claimed in claim 1, wherein the method is carried out without addition of a solvent.
7. (Previously Presented) The method as claimed in claim 1, wherein the method is carried out at a temperature in the range from -20 to +120°C.

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8. (Previously Presented) The method as claimed in claim 1, wherein the amount of the chlorinating agent used is selected such that a degree of chlorination of significantly greater than 1 results.

9. (Previously Presented) The method as claimed in claim 2, wherein 1,3,7,9-tetrachloro-2,8-dimethylphenoxathiin of the formula



is used.

10. (Previously Presented) The method as claimed in claim 2, wherein elemental chlorine or sulfuryl chloride is used as chlorinating agent.

11. (Previously Presented) The method as claimed in claim 2, wherein the co-catalyst is used in an amount of from 0.001 to 5% by weight, based on the amount of the ortho-xylene used.

12. (Previously Presented) The method as claimed claim 2, wherein the ratio of Friedel-Crafts catalyst or its precursor to the co-catalyst is in the range from 500:1 to 1:5.

13. (Previously Presented) The method as claimed claim 3, wherein the method is carried out without addition of a solvent.

14. (Previously Presented) The method as claimed in claim 3, wherein the method is carried out at a temperature in the range from -20 to +120°C.

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15. (Previously Presented) The method as claimed in claim 3, wherein the amount of the chlorinating agent used is selected such that a degree of chlorination of significantly greater than 1 results.